

**PIEZOELECTRIC ACTUATOR**

BEST AVAILABLE COPY

**Patent number:** WO0057497  
**Publication date:** 2000-09-28  
**Inventor:** HEINZ RUDOLF [DE]; HENNEKEN LOTHAR [DE]  
**Applicant:** BOSCH GMBH ROBERT [DE]; HEINZ RUDOLF [DE]; HENNEKEN LOTHAR [DE]  
**Classification:**  
 - international: H01L41/083; H01L41/047  
 - european: H01L41/047; H01L41/083  
**Application number:** WO1999DE03283 19991013  
**Priority number(s):** DE19991013271 19990324

**Also published as:**

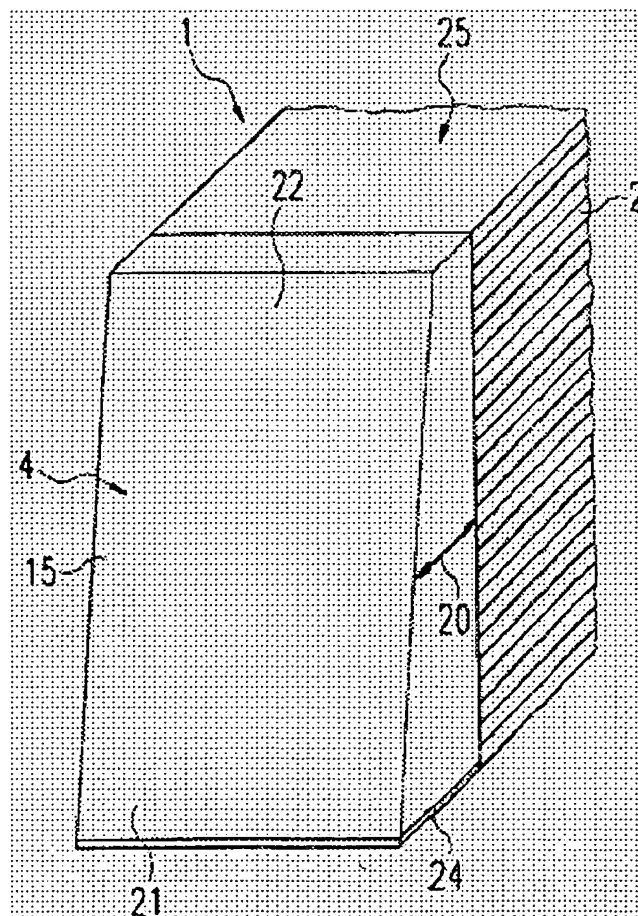
EP1173895 (A1)  
 US6573639 (B1)  
 DE19913271 (A1)  
 EP1173895 (B1)

**Cited documents:**

EP0362416  
 US5406164  
 JP63169777  
 JP63009168  
 JP6296048

**Abstract of WO0057497**

The invention relates to a piezoelectric actuator (1) comprising a plurality of plates (2) made of a piezoelectric material, which are disposed in such a way that they form a stack (25) in the direction of stacking, a plurality of flat inner electrodes (5, 6), alternately disposed with the plates (2) made of piezoelectric material and at least two outer electrodes (3, 4) placed on the outer side of the stack along the direction of stacking, wherein the inner electrodes (5, 6) are alternately connected to one of the outer electrodes (3, 4) by means of a contact area. According to the invention, the outer electrodes (3, 4) are placed in the form of a coating made of an elastic, electrically conductive polymeric material (15) on the outer side of the stack (25).



Data supplied from the esp@cenet database - Worldwide